Cost Effective Surveillance for Smaller Companies

"Doing More with Less"

What's on the Menu

- Background: "The Shrinking Corporate Medical Department"
- The Outsourced Medical Department
- Integrated Manage System Model (IMS)
- Conclusion

"The Shrinking Medical Department"

- Mergers
- Downsizing
- Re-evaluation of medical departments' value in organization

What Happened?

- Decentralization of Services
- Uncoordinated Approaches
- Under-served workforces
- Poor Quality of Services
- Increased Medical Cost to Employers

Outsourcing Issues of Free-Standing Clinics

- Increasing Trend Toward Contracting Occupational Health/Medicine Services (source: 2001 Health Care Business, Richard K. Miller Associates)
- Increasing Number of Employees are Being Treated at 24-hour "Urgent Care Clinics" for Work-Related Injuries
 - Pros—Companies Benefit by Reducing In-house Costs and Overhead of Medical dept.
 - Cons—These Clinics are more Likely to Employ
 Treatment Techniques (prescriptions and time off) that
 Drive Up Workers' Compensation Costs and Increase
 OSHA Recordables. Episodic Care Only.

Bridging the Gap Between What Employers Want and Need in a System:

Employers Want

- Healthy, Productive Employees
- Manageable Costs
- Adds Value
- Reduces Administrative Burden

Employers Need

- Managed by Qualified Medical Experts (Why?)
- Cost-Effective
- Controls Quality
- Flexible for Employee & Employer
- Manages Population Health Issues
- Delivers Proactive & Preventive Service

The Outsourced Medical Department:

Balancing Employers' Population Health Needs with Adequate Individual Employee Health Services

Outsourcing Model Option?

Integrated Managed System (IMS)

IMS Advantage

Delivers Medical Surveillance Programs to Small and Medium-Sized Companies at Costs Comparable to Exam Services of Free-Standing Clinics

IMS Model Provides:

- Leveraged Management by Expert Board-Certified Occupational Medicine Physicians
- Administrative Support to Reduce Compliance/Regulatory Burden
- Technological Based Applications Using Web-Enabled Capabilities, Data-Base Utilization and OHM Software
- No Geographic Price Variation

Leveraged Medical Management

Centralized Physicians and Support Personnel Provide Management Services that:

"Maximize Organizational Productivity while Minimizing Total Health Costs"

Physician IMS Services

- Population Health Studies
- Development of Intervention Targets
- Cluster Analysis
- Exposure Trends
- Related Toxicology Issues

Population Health Studies

Wellness Program Targets and Intervention

- Lipid Intervention Program
 - Cholesterol: 46% of Employees with Levels Above 200
 - Triglycerides: 43% above 150mg/dl 27% above 200mg/dl
- Weight Control & Fitness Program (BMI Test)
- BMI Under 25=Normal
 - 42% Obesity BMI >30
 - 34% Moderately Overweight BMI 25-30
 - Average BMI is 29

Cluster Analysis

- 5 Individuals in an Open "Pump and Treat" Facility. Possible Exposure to Birds and Rodents in Central Oregon from October to May
- URI Symptoms. 3 smokers. 2 with Previous History of Asthma
- Differential: Cryptococcus, Psittacosis,
 Histoplasmosis, Legionaire's and Sine Nombre
- All titers negative. All Symptoms Resolved

Exposure Trends: Lead and Cadmium Exposure

- 2100 Encounters over Two Years
- Non-Detectable Lead Levels: blood lead=540, blood cadmium=715, urine cadmium= 1201
- Blood Lead (50ug/100g blood) Average =5.28, 20-30=47, 30-40=10, >40=1
- Blood Cadmium (ug/L) Average =0.97, 2-3=75, 3-4=27, 4-5=8, >5-4
- Urine Cadmium(μ g/g creatinine) Average=0.24, 1-2=81,2-3=9, >3=6
- Beta-2 Urine Microglobulin Average=78. Greater than 300 μg/g Creatinine=25

Exposure Trends: Benzene

- 720 Encounters Over Two Years
- No Detectable Blood Benzene Levels
- Average: reticulocyte count=1.7, platelet count=256, Hb/Hct=15.1/43.8, WBC=6700
- WBC<4200=17, platelets<120,000=3</p>
- Borderline Anemia: 7 Females (Hct<38) and 13 Males (Hct<40). 1 Female Post Partum Employee is the Only Employee with Hct<30.</p>
- No Monocytosis, Polycythemias or Excess Abnormal Cells
- No Blood Dyscrasias, Leukemia or Lymphoma Reported

Typical Exam Fee Ranges for Small to Medium-Sized Businesses

Customary Exam Fees

Range Due to Geographical Locations & Test Specifications

Asbestos Exam

\$150.00--\$300.00

Hazmat Exam

\$300.00--\$600.00

OSHA Cadmium

\$100.00--\$150.00

Respirator Exam

\$ 75.00--\$150.00

The Value

Full Exam and Management of Medical Surveillance Process

- Quality Control Function
- Program Consistency
- Exam Scheduling & Program Administration
- Professional Medical Consultation on all Aspect of Program
- Medical Records Storage
- Meets all Aspects of Regulatory Compliance Standards
- Program Auditability
- Employee Communication and Counseling
- Population Health Studies

Admin Benefits of IMS

- Small Companies Have Limited Administrative Resources
- IMS Model Designed to Deliver Admin. Functions Related to Exams
 - Processing
 - Scheduling
 - Recording
 - Analyzing
- Buy only what you need

Examples: Admin Support



Appointment Protocol

The following employee has been scheduled for the MEDICAL PROCEDURES listed below on the date and at the location shown. If you are unable to keep this scheduled appointment or have any questions, please contact me at the number listed below.

EXAM INFORMATION

Employee Sample, Employee Company Appt Date 10/11/01 Appt Time08:00am

CONTACT INFORMATION

Client Svc Rep Clinic Address Phone F-Mail

Far Phone Fax

EMPLOYEE INSTRUCTIONS

Avoid loud noise exposure for 14 - 16 hours prior to the exam. If you use hearing axis, please bring them to the clinic.

Avoid found and drink for 8 hours grice to exam. Water and decaffeinated coffee are OK. Avoid alcohol consumption for 24 hours prior to exam. Please anno photo ID and list of modical ons with you.

"BRING THE COMPLETED EXAM PACKET AND THIS FAX TO YOUR APPOINTMEN If you wear contact lenses, do not insert them on the day of the examt. Bring a

NOTE: The following tests and procedures listed below will be performed DO NOT leave until all of them have been completed.

CLINIC INSTRUCT

IMPORTANT: Please check and confirm all identification prior to a saminar on. Mark Friday appointments for Saturday delivery. Check expiration date on all blood tubes. If expired, D NOT USE. Do not store tubes in hot location.

AUTHORIZED SERVICE: Baseline Examination

matilla - Exam I - Baseline Exam

physical exam components to be performed

X History & Physical stionnaire and exam results in Bag #3 and place in

ar/Far, Accom. Fld of Vis. Color Vis. Deoth Perc & Tonomotry X Vision - Near & Far X Tonometry (35+)

X Audlogram X Pulmonary Function Test (PFT) complete and document at least THREE trials.

X Electrocardiogram (EKG)

X Chest X-Ray (2 View - with Interp.) laboratory components to be performed

X Blood Chemistry Panel

(COLLECTION ONLY)

Draw chemistries into del separator tube, spin down and pour off into plastic transport tube. Place all blood work in Bao #1 and place in WorkCare Kit.

Today's Date: 10/11/01

Mix well- gently invertitube 10 times (lavender top). X CBC with Differential X Urinalysis with Micro (UA) Place specimen in Bag #1 and place in WorkCare Kit.

X Blood Lead/ZPP X OSHA Cadmium Panel

Urine Chromlum

X Blood Cholinesterase (Serum &

X Drug Screen- NIDA

Use Bag #2 and place in WorkCare Kit. Airborne all to Pacific Toxicology.

X Breath Alcohol Test (EBT) additional studies to be performed X Respirator Questionnaire

For WorkCare INTERNAL USE ONLY.

Note: PLEASE>>>> follow this protocol (including a NIDA Panel 613 for the Drug Test) and use our WorkCare kit. PLEASE>>>>> Send Medical History Questionnaire, all original exam reports (i.e. Audiogram Strip, PFT, etc.) and any other paperwork from the exam to Pacific Toxicology (via Airborne Express) with the lab work, PLEASE>>>>he sure to complete VISION: DISTANT/NEAR

Examples: Admin Support



333 S. Anita Dr., Suite 630, Crange, CA 92806 Phr (800) 455 6155 Fax. (714) 456 2154 Page 1

Today's Date: C&/21/2001 Exam Date: C&/15/2001

PERSONAL AND CONFIDENTIAL

Dear Mr. Lawson

I am writing with regards to your recent examination. The examination any medical problems that could interfere with your ability to perform with medical care or a complete medical examination.

enformed only to assess whether you have tainot meant to be a substitute for regular

The firstory and physical should have been discussed with you of the time of the exam. If you have any questions that were not addressed by the examining physician or have any further questions, please contact your personal physician or call WorkCare at the number isotopic above.

Your vital signs revealed the following.

/itals Height: 72.0 inches Weight

* Your blood pressure was found to be independent...

Weight: 22000 lb

Blood Pressure: 150 / 82

Your systolic blood pressure was round to be bove the normat reference range. I would recommend that you follow up with your personal physician with the evaluation.

Body Mass Index. 31

Body Mass Index (BMI) is used to determine healthy weights for people. The formula correlates highly with body far and is expressed as weight in kilograms divided by height in meters squared. Cutoff points for desirable BMI ranges can be identified based on the relationship between BMI and health outcome.

* A BMI greater than 26 is considered to be overweight. There is a moderate increase in mortality for a BMI greater than or equal to 30 but not greater than 35. See your physician regarding weight control program.

Your vision testing revealed the following:

Color Vision: normal

Visual Acuity	Near Vision	Left	Right	Both	Far Vision	Leff	Right	Both
-	Corrected:	medled:		Corrected:	20/20	20/20	20/20	
	Uncorrected:	Uncorrected:			Uncorrected:			

All vision tests were normal

Your audiogram revealed the following:

	500hz	1000hz	2000hz	3000hz	4000hz	6000hz	8000hz
.ett	10	5	5	15	30	25	35
Right	5	5	5	5	20	30	45

- *Your hearing in the left ear was abnormal. There is a Mild hearing loss in the left ear. Extended exposure to loud noises may make this loss worse.
- * Your hearing in the right ear was abnormal. There is a Mild hearing loss in the right ear. Extended exposure to loud noises may make this loss worse.

Your pulmonary function test revealed the following:

Current





333 S. Anila Ori, Suilo 630, Orange ICA 92668 Ph: (800) 455-6155 | Fax. (714) 456 2154

> FVC: 4.160 % Predicted: 80.62% FEV1: 3.420 % Predicted: 64.23% FEV1/FVC: 82.21 % Predicted: 104.48% FEF 25-75: 3.180 % Predicted: 77.37%

Your pulmonary function tests were normal.

Your EKG revealed the following.

EKG result for 08/15/2001: Normal

Comments

Your EKG revealed no significant apportualities.

Your chest xray revealed the following.

CXR result for 08/15/2001: No Active Disease

Comments

Your Chest X-Ray revealed no significant abnormalities.

In addition to the results, the following are additional comments regarding your medical examination. You should share this information with your personal physician:

Elevated blood pressure. Abnormal audiogram.

As a result of the above medical conditions, the following work status and a strictions are being recommended to your employer. NO WORK RESTRICTIONS

Lappreciate the opportunity to review your examination for URS Colore for. If you have any questions now or in the future, please feel free to call me.

Page 2 Lawson, James

Today's Date: 08/21/2001

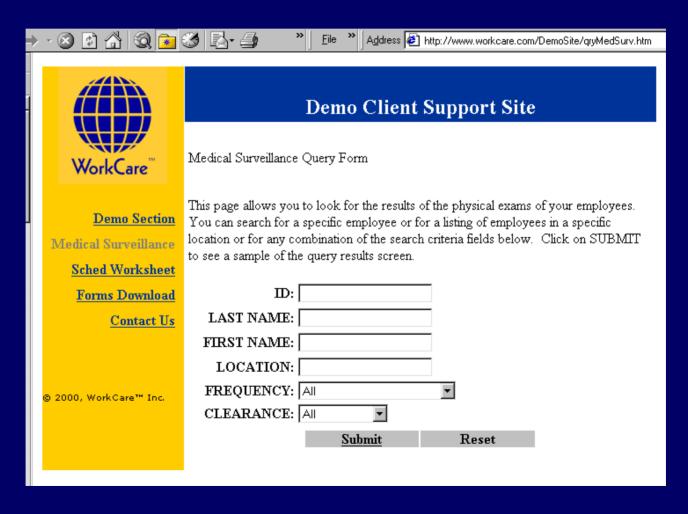
Exam Date 08/15/2001

Sincerely.

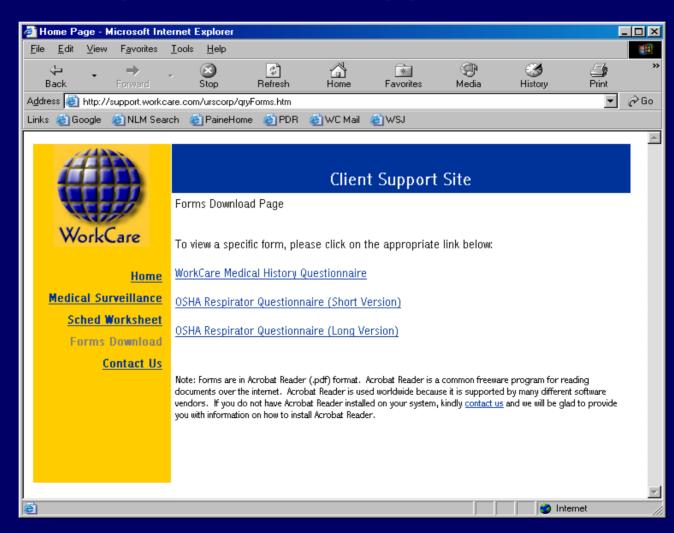
Examples of Tech Support

- Integration of Standardized Medical Exam Protocols for Companies with Multiple Sites and Exposures
- Client Support Site
- Forms Download Area

Examples: Tech Support



Examples: Tech Support



Conclusions

- IMS Opens a Route for Small Employers to Receive Medical Services at the level of Fortune 50 Companies
- Management, Administrative and Tech Support Built into Model
- Buy Only the Services They Need
- Population Health Services Bundled with Clinical Exam Services for a Fixed Price
- One Point of Contact for all Services
- Continuous Quality Improvement and Standardized Services—Especially Critical to Multi-Site Locations
- Standard Reports for Exam and Surveillance Services

For Further Information



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